

Effective Climate Messaging for Local Officials

Dan Petrik | Lake & River Shoreland Program Manager

Ceil Strauss | Floodplain Program Manager



Agenda

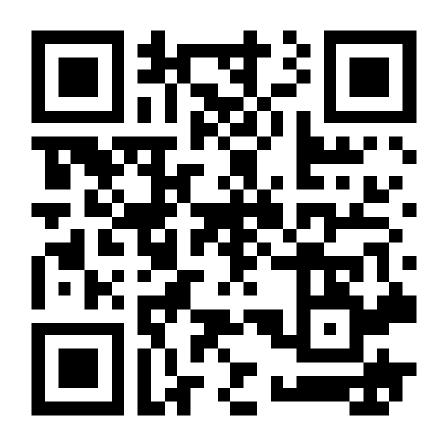
- Summarize climate trends
- Present & discuss concepts of how climate trends are affecting shoreland and floodplain resources

Purpose

- Help local governments make decisions understanding impacts from climate trends
- Partner with you on communicating climate trends to local officials







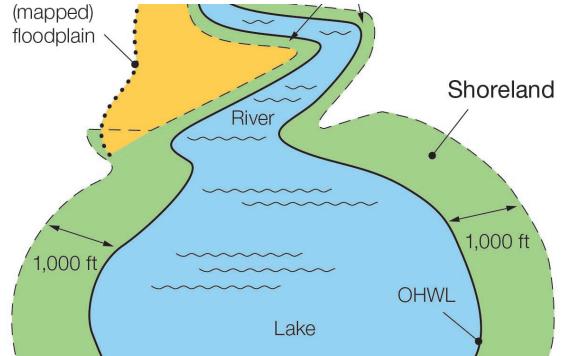
Or, go to slido.com, and enter code #4129286

Shoreland & Floodplain Resources

The following resources within and adjacent to the shoreland and floodplain regulatory boundaries:

- ☐Surface water
- ☐ Surface water-connected groundwater
- ☐ Fish and wildlife
- Habitat



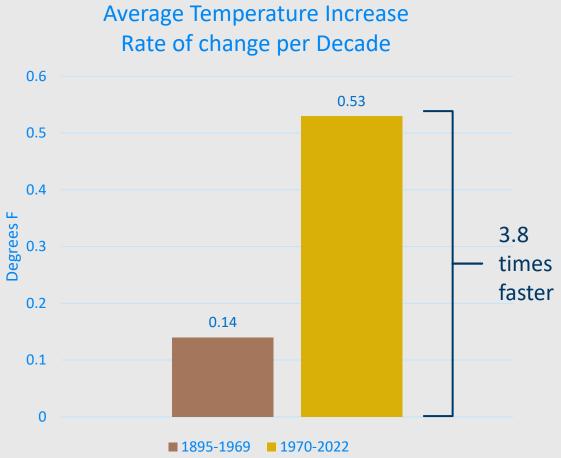






We are getting warmer - faster

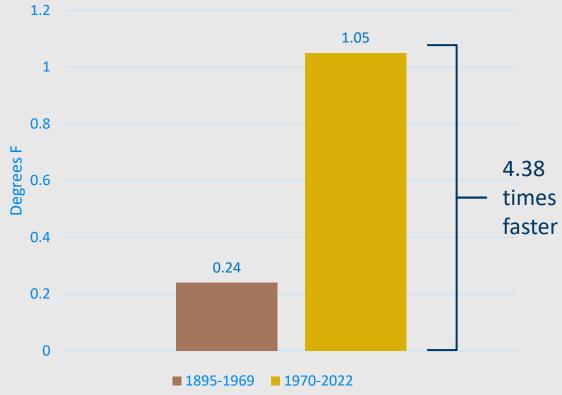




Winters are really getting warmer

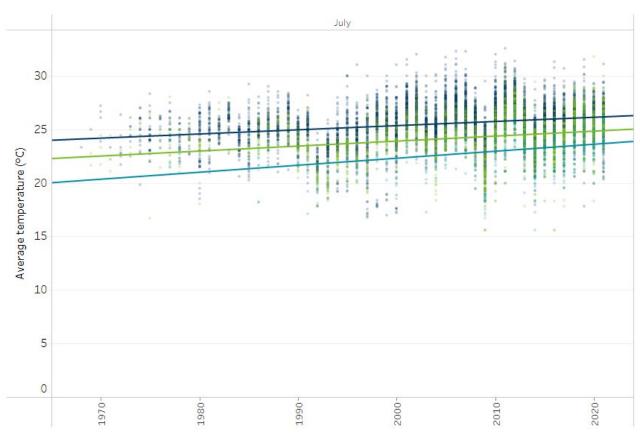


Average Daily Low Temperature Increase Rate of change per Decade



Lakes are Getting Warmer

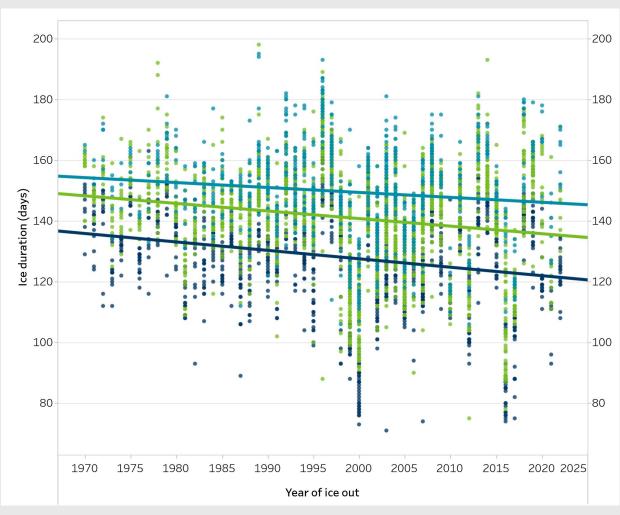




July-August Lake temperatures have increase by 3.1 - 3.9 degrees F over the last 50 years

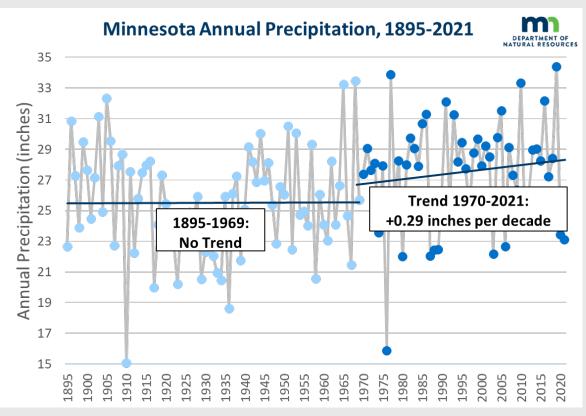
Lake ice season averaging 8-15 days shorter since 1970



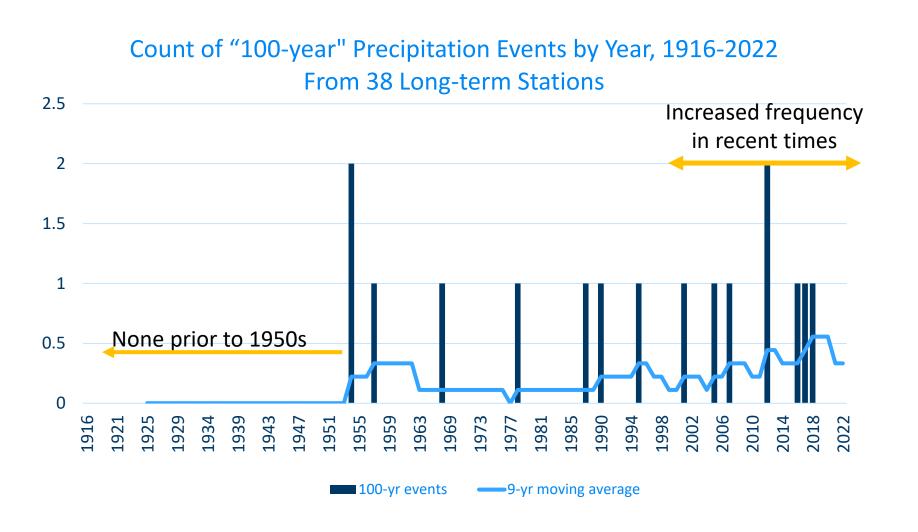


We are getting wetter

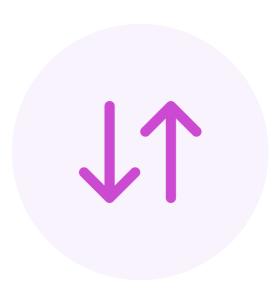




Increase in 100-year daily rainfall events



slido



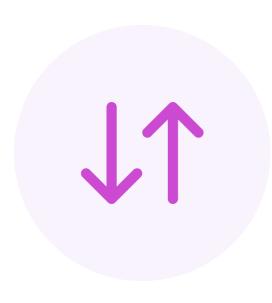
Rank how aware WERE YOU of these climate trends from high to low

Rank how aware WERE YOU of these climate trends from high to low



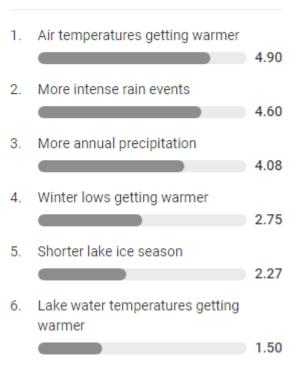
⁽i) Start presenting to display the poll results on this slide.

slido



Rank YOUR
OFFICIALS'
awareness of
these climate
trends from high
to low

Rank YOUR OFFICIALS' awareness of these climate trends from high to low



⁽i) Start presenting to display the poll results on this slide.

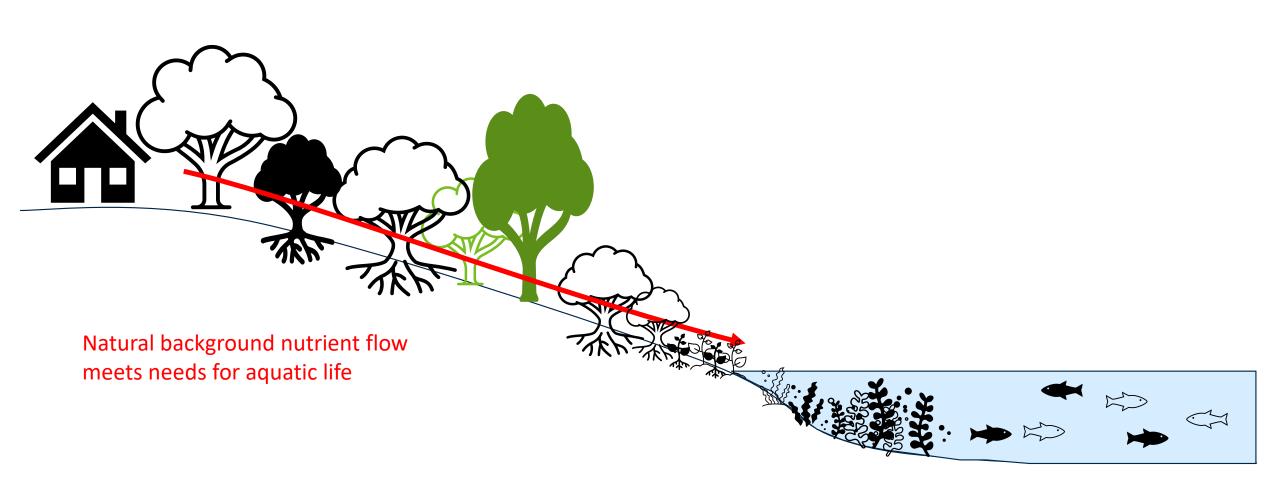
Do any of these trends surprise YOU?

Which of these trends would surprise your local officials?

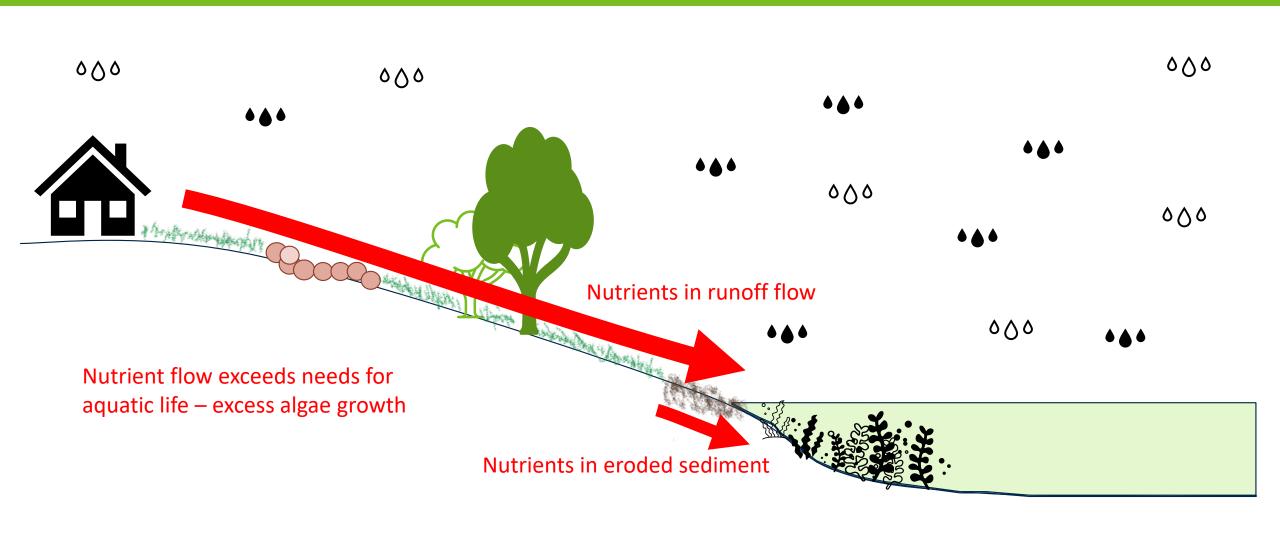
The Climate-Development Connection



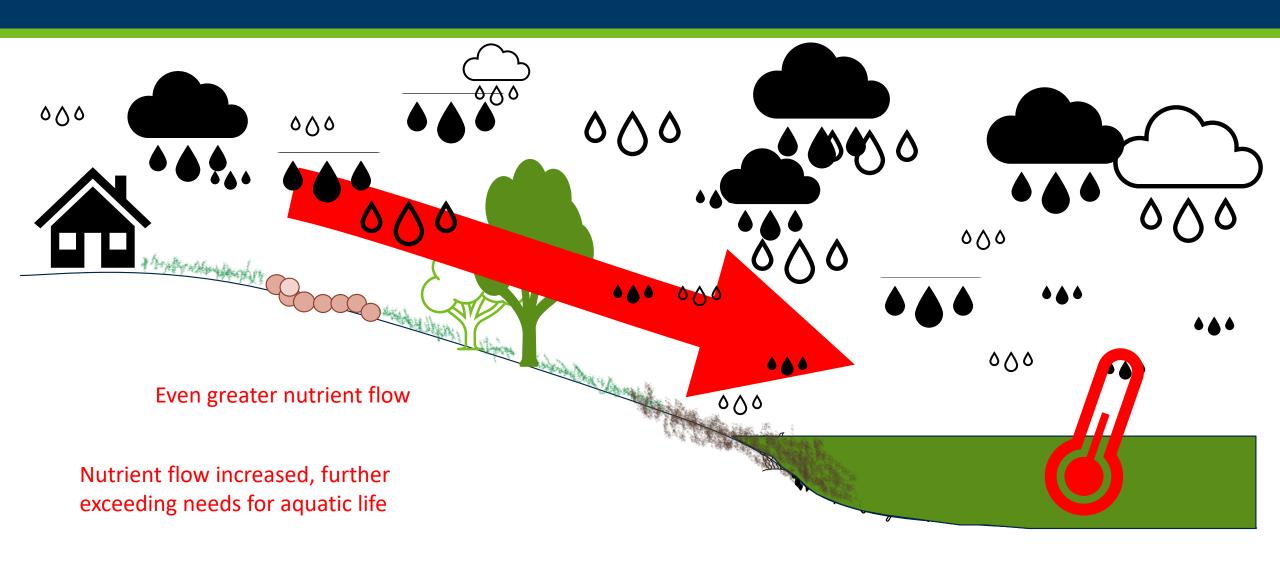
Natural Shoreline Retained



Contemporary Shoreline Development



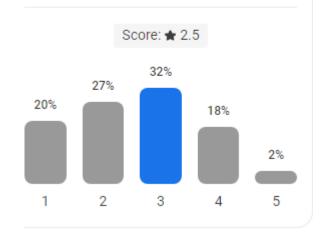
Increased Rain and Intensity





slido How well do you your officials UNDERSTAND that this type of development and changing climate will cause additional nutrient flow and algae growth? (1=doesn't understand, 5=understands very well)

How well do you your officials
UNDERSTAND that this type of
development and changing climate
will cause additional nutrient flow and
algae growth? (1=doesn't understand,
5=understands very well)

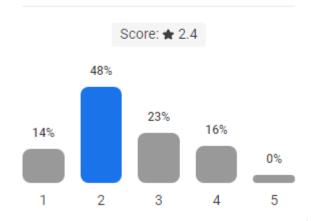


⁽i) Start presenting to display the poll results on this slide.



slido **HOW CONCERNED** are your officials that this type of development will cause additional nutrient flow and algae growth? (1=Not Concerned, 5=Very Concerned)

HOW CONCERNED are your officials that this type of development will cause additional nutrient flow and algae growth? (1=Not Concerned, 5=Very Concerned)



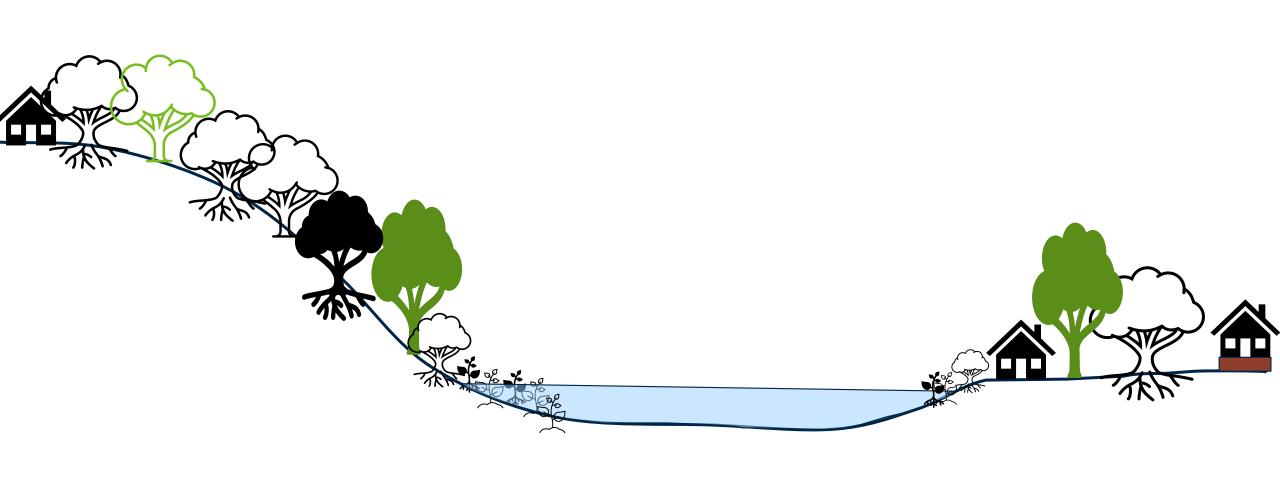
(i) Start presenting to display the poll results on this slide.

• What about this concept isn't clear?

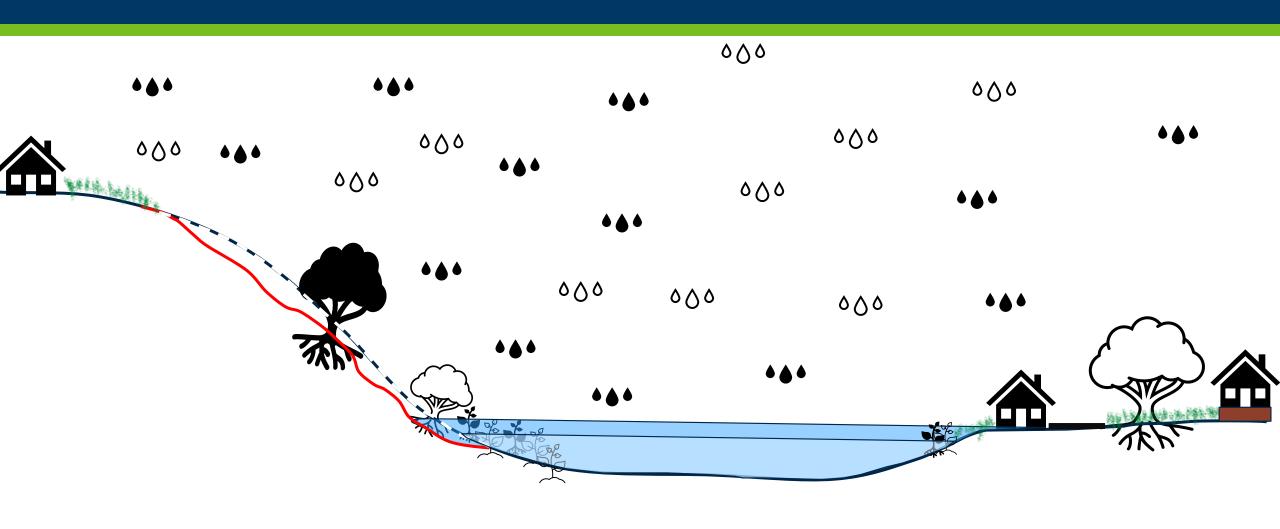
• What help do you need to get this concept across?

 If officials understand and are concerned, are they more likely to take action?

Natural Vegetation Retained



Natural Vegetation Removed



More Rain and Bigger Events



MN Examples





U of MN area: Mississippi River

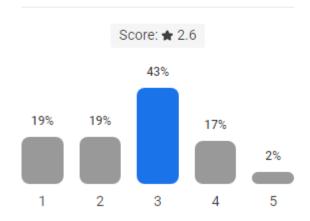
Le Sueur River



How well do your officials UNDERSTAND that this type of development and changing climate will increase erosion and flooding risks? (1=doesn't understand, 5=understands very well)

(i) Start presenting to display the poll results on this slide.

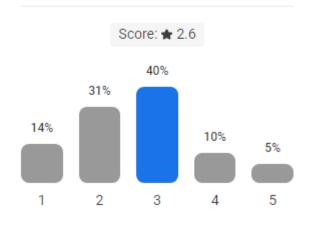
How well do your officials
UNDERSTAND that this type of
development and changing climate
will increase erosion and flooding
risks? (1=doesn't understand,
5=understands very well)



slido

HOW CONCERNED are your officials that this type of development will increase erosion and flooding risks? (1=not concerned, 5=very concerned)

HOW CONCERNED are your officials that this type of development will increase erosion and flooding risks? (1=not concerned, 5=very concerned)





⁽i) Start presenting to display the poll results on this slide.

• What about this concept isn't clear?

• What help do you need to get this concept across?

 If officials understand and are concerned, are they more likely to take action?

 Have you tried communicating these nutrient flow or flooding concepts? If so, how have you done that?

- What should we do next on education and outreach:
 - Understanding the problem
 - Options for solving the problem
 - Better ordinances
 - Better application decisions
 - Other?



Thank You!